Name:



# New York State Testing Program

# 2023 Mathematics Test Session 1

Grade 5

May 2-4, 2023

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# RELEASED QUESTIONS



#### TIPS FOR TAKING THE TEST

Here are some suggestions to help you do your best:

- Read each question carefully and think about the answer before making your choice.
- You have been provided with mathematics tools (a ruler and a protractor) and a reference sheet to use during the test. It is up to you to decide when each tool and the reference sheet will be helpful. You should use mathematics tools and the reference sheet whenever you think they will help you to answer the question.

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- There is  $\frac{7}{8}$  of a whole pizza in Anthony's refrigerator. He eats  $\frac{3}{8}$  of the whole pizza for lunch. What fraction of the whole pizza is left after Anthony eats pizza for lunch?
  - A  $\frac{10}{8}$
  - $\mathbf{B} \qquad \frac{5}{8}$
  - $C = \frac{4}{8}$
  - **D**  $\frac{3}{8}$
- What number represents ninety-nine thousandths?
  - A 0.099
  - B 0.990
  - C 9.900
  - **D** 99.000
- A shipping box in the shape of a right rectangular prism has a base with an area of 16 square feet and a height of 6 feet. What is the volume, in cubic feet, of the box?
  - **A** 22
  - **B** 96
  - C 192
  - **D** 1,536

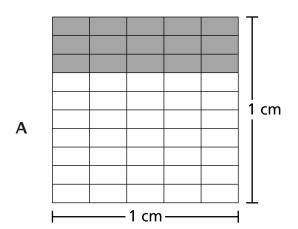
- What number has the same value as  $32 \times 10^4$  ?
- **A** 3.2

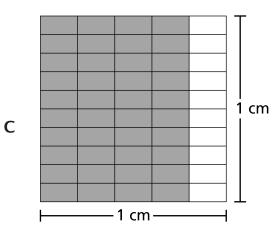
- **B** 320
- **C** 0.0032
- **D** 320,000

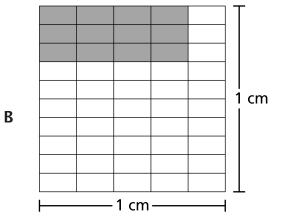
GO ON

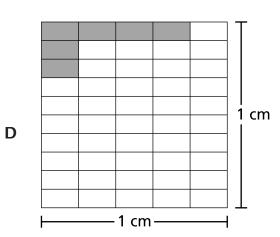
**9** Which model is shaded to represent the area of a rectangle that is  $\frac{4}{5}$  centimeter long and

 $\frac{3}{10}$  centimeter wide?







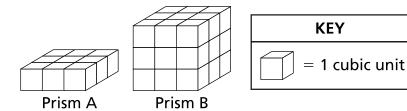


- A mall parking lot has 2,232 parking spaces. There are 24 parking spaces in each row. How many rows are in the parking lot?
  - **A** 89
  - **B** 93
  - **C** 94
  - **D** 97
- A teacher has 20 feet of string to use for a class project. She uses all of the string and gives an equal amount to 8 students. How much string, in feet, will each student get?
  - **A**  $2\frac{1}{5}$
  - **B**  $2\frac{3}{10}$
  - **C**  $2\frac{1}{2}$
  - **D**  $2\frac{3}{4}$

- **A** 2
- **B** 4
- **C** 6
- **D** 8

- Which expression has a value less than  $1\frac{1}{2}$  ? 17
  - **A**  $1\frac{1}{2} \times \frac{3}{2}$
  - **B**  $1\frac{1}{2} \times \frac{1}{2}$
  - $\mathbf{C} \qquad 1\frac{1}{2} \times 2$
  - **D**  $1\frac{1}{2} \times 1$
- A diagram of two right rectangular prisms, each made with unit cubes, is shown below. 18

**KEY** 



- What is the total volume, in cubic units, of Prism A and Prism B?
- Α 9
- В 18
- C 27
- D 36

- The total snowfall for a town from Friday through Sunday was 34 inches.
  - On Friday, the snowfall was 11.25 inches.
  - On Saturday, the snowfall was 9.9 inches.
  - How many inches of snow fell on Sunday?
  - **A** 12.85
  - **B** 13.15
  - **C** 20.34
  - **D** 21.15
- Dorian walks at an average speed of  $2\frac{1}{2}$  miles per hour. He walks for  $\frac{3}{4}$  hour. How many miles does he walk?
  - **A**  $1\frac{3}{4}$
  - **B**  $1\frac{7}{8}$
  - **C**  $2\frac{3}{8}$
  - **D**  $3\frac{1}{4}$

Ms. Roman buys 3.5 pounds of birdseed. She pays \$4.28 per pound. How much did Ms. Roman pay for all of the birdseed?

- **A** \$4.28
- **B** \$7.78
- **C** \$12.84
- **D** \$14.98

A store sells packages of black pens, blue pens, and red pens.

- $\frac{4}{9}$  of the packages are black pens
- $\frac{1}{6}$  of the packages are blue pens

What fraction of the packages are red pens?

- **A**  $\frac{5}{15}$
- **B**  $\frac{7}{18}$
- **c**  $\frac{10}{15}$
- **D**  $\frac{11}{18}$

Name:



# New York State Testing Program

# 2023 Mathematics Test Session 2

Grade 5

May 2-4, 2023

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# RELEASED QUESTIONS

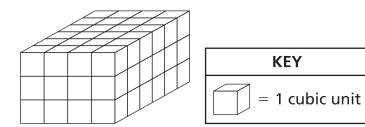


#### TIPS FOR TAKING THE TEST

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- Read each question carefully and think about the answer before making your choice or writing your response.
- You have been provided with mathematics tools (a ruler and a protractor) and a reference sheet to use during the test. It is up to you to decide when each tool and the reference sheet will be helpful. You should use mathematics tools and the reference sheet whenever you think they will help you to answer the question.
- Be sure to show your work when asked.

A diagram of a right rectangular prism made of unit cubes is shown below.



What is the volume, in cubic units, of the right rectangular prism?

- **A** 13
- **B** 24
- **C** 60
- **D** 72
- There are 210 apples placed equally into 14 boxes. How many apples are in each box?
  - **A** 12
  - **B** 14
  - **C** 15
  - **D** 21

Diane walks  $3\frac{3}{8}$  miles on Saturday. She walks  $1\frac{5}{6}$  fewer miles on Sunday than she does on

Saturday. How many miles does Diane walk on Sunday?

- **A**  $1\frac{13}{24}$
- **B**  $2\frac{11}{24}$
- **C**  $2\frac{13}{24}$
- **D**  $5\frac{5}{24}$
- Which statement about a rhombus and a square is always true?
  - A Both shapes are parallelograms that have four equal sides.
  - **B** Both shapes are parallelograms that have four right angles.
  - **C** Both shapes are quadrilaterals with exactly two acute angles.
  - **D** Both shapes are quadrilaterals with exactly one pair of parallel sides.
- A cook in a restaurant has 13 gallons of milk. How much milk, in quarts, does the cook have?
  - **A** 17
  - **B** 26
  - **C** 42
  - **D** 52

#### This question is worth 1 credit.

The heights, in inches, of four towers made from toothpicks are shown below.

- 33.1
- 33.2
- 29.3
- 33.3

Write a number sentence comparing the heights, in inches, of the two tallest towers. Be sure to include the symbol >, <, or = in your answer.

This question is worth 1 credit.

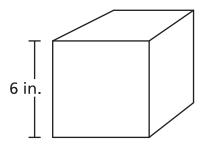
Andre is using a 15-foot piece of ribbon for an art project. He cuts the ribbon into equal-sized pieces  $\frac{1}{3}$  foot in length. Using all of the ribbon, how many pieces of ribbon does Andre cut?

Answer pieces

GO ON

This question is worth 1 credit.

What is the volume, in cubic inches, of the cube shown in the diagram below?



Answer \_\_\_\_\_ cubic inches

This question is worth 2 credits.

Josiah makes a total of 195 ounces of lemonade. He pours the lemonade into 16-ounce bottles until each bottle is full. What is the greatest number of bottles Josiah can fill completely with the lemonade?

Show your work.

Answer	bottles
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This question is worth 2 credits.

A multiplication problem is shown below.

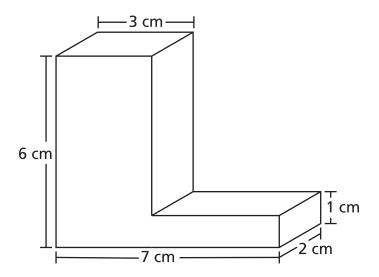
$$42 \times \frac{5}{8}$$

A student claims that the product will be greater than 42. Is the student's claim correct? Explain without calculating the product.

Explain how you know your answer is correct.

#### This question is worth 2 credits.

A diagram of a 3-dimensional figure is shown below.



What is the volume, in cubic centimeters, of the figure?

Show your work.

Answer \_\_\_\_\_ cubic centimeters

GO ON

#### This question is worth 2 credits.

A student writes 67.203 in expanded form as shown below.

$$(6\times10)+(7\times1)+\left(2\times\frac{1}{10}\right)+\left(3\times\frac{1}{100}\right)$$

The student made an error. Where did the student make an error? As part of your answer, write the number in the correct expanded form.

Explain	your	answer.
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This question is worth 2 credits.

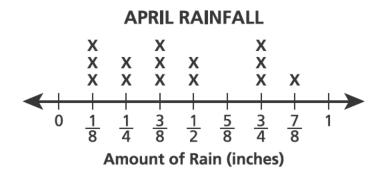
Adam opens a  $\frac{1}{2}$ -pound can of tuna. He uses all the tuna to feed his cats. He puts an equal amount of tuna in 4 containers for his cats. How much tuna, in pounds, is in each container?

Show your work.

Answer	pound(s)
	p = a a (5)

This question is worth 3 credits.

The line plot below shows the recorded amount of rain that fell in a city during the month of April.



What was the total amount of rain, in inches, recorded in April? Show your work.

Answer \_\_\_\_\_ inches

Show your work.

The total amount of rain that fell in the city during the month of August was  $8\frac{1}{4}$  inches. What was the difference in total rainfall, in inches, between August and April?

Answer \_\_\_\_\_ inches